

Lamb Dysentery Prophylactic in 1928.

231

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During 1927 and 1928 further field trials of Lamb Dysentery Vaccine, prepared from organisms previously described, isolated from lambs acutely affected with lamb dysentery, have been made. Experiments have been carried out as in former years, namely, ewes have been inoculated once during the autumn and again about a fortnight before lambing began in the flock. Experiments have so been arranged that uninoculated ewes, comparable in every way, running on the same ground and lambing at the same time as the inoculated, have been kept as controls. *Post-mortem* examinations have been carried out by one of us (W. S. G.) on every lamb which has died, no matter from which ewe or from what cause.

Three types of vaccine were used : (A) The same as that used during last season, and (B) and (C) slight modifications. The following are the results of the death rate on thirty-one farms among lambs born from ewes inoculated with the various types of vaccine and from control ewes on the same farms :—

Lambs born from ewes inoculated with type A vaccine—2,120, of which 17 or 0·80 per cent. died of lamb dysentery; type B vaccine—744, of which 8 or 1·12 per cent. died of lamb dysentery ; type C vaccine—1,157, of which 13 or 1·12 per cent. died of lamb dysentery.

Lambs born from uninoculated ewes—2,523, of which 330 or 13·05 per cent. died of lamb dysentery.

In diagnosing lamb dysentery in lambs only those showing evidence of ulceration of the intestine on *post-mortem* examination have been classified as being affected with lamb dysentery.

In addition to the above experiment many thousands of ewes have been inoculated in various parts of the country with vaccine of the A type and the death rate from lamb dysentery among their lambs has been very small.

Anti-serum as used last year has been injected into many hundreds of lambs during the past lambing season ; amongst them the death rate from lamb dysentery is under 1 per cent. On some farms it was found possible to control the results of the action of the serum by injecting only alternate lambs born. The result of such work is that on fifteen farms over 1,000 lambs were injected within a few hours of birth ; the death rate from lamb dysentery was approximately 0·5 per cent. On the same farms the death rate from an almost equal number of controls was over 18 per cent.

It is proposed to publish a full account of the season's work at a later date.

